Verbatim

MediaShare™ Wireless

User Manual
For Android OS
Version 1.00

Download on the App Store

ANDROID APP ON Google play

Table of Contents

TABLE OF CONTENTS **2**

ABOUT THIS MANUAL **3**

PRODUCT OVERVIEW **3**

- PRODUCT FEATURES 3
- OPERATING MODES 3
- PRODUCT SPECIFICATIONS 3
- SYSTEM REQUIREMENTS 3
- PRODUCT VIEW 4
- CHARGING MEDIASHARE 4
- INSTALLING STORAGE DEVICES 4
  - SD Memory Card 4
  - USB Device 4

USING MOBILE DEVICES **4**

- INSTALLING THE APP 4
- WIRELESSLY CONNECTING YOUR ANDROID MOBILE DEVICE 5
- LAUNCHING THE APP 5
- BASIC FUNCTIONALITY 6
  - Playing Music 6
  - Playing Video 6
  - Viewing Photos 7
  - Sharing Photos 7
  - Viewing Documents 8
- MANAGE MODE 8
  - Copy and Delete Functions 8
- SETTINGS MENU 8
  - MyMediaShare Settings 8
  - Wi-Fi and LAN Settings 9
  - Internet Settings 9
  - Clear Cache Button 10
- EXITING THE MEDIASHARE APP 10
- UNINSTALLING THE MEDIASHARE APP 10

GETTING HELP **10**

LIMITED WARRANTY TERMS **11**

FCC COMPLIANCE **11**

CE COMPLIANCE DECLARATION **11**

CANADA IC RSS-210:2010 ..... **11**

WEEE NOTICE **11**

RIGHTS **11**

GNU GENERAL PUBLIC LICENSE **12**

About This Manual

This manual describes how to use the Verbatim MediaShare Wireless Streaming Device with your Android smartphone or tablet. If you have an iOS smartphone or tablet, please download the user manual for "MediaShare Wireless for iOS".

Product Overview

The Verbatim MediaShare Wireless Streaming device allows you to use SD memory cards and USB external storage devices as Wi-Fi accessible media. Simply insert your SD/SDHC/SDXC memory card into the SD slot or connect your USB external storage into the built-in USB port, press the power button on the MediaShare and you can now wirelessly access your videos, music, photos, data and stream them to your iPad®, iPhone®, Android™ tablets, and smartphones. There is no need to worry about running out of space on your mobile devices.

For maximum portability, MediaShare Wireless has a built-in rechargeable battery. Plug it into any available USB port on your computer to charge the battery.

Product Features

- Supports SDXC, SDHC and SD memory cards up to 128GB. SD adapter is needed for MicroSD and MiniSD.
- Supports USB storage devices
- Streams media to up to 5 Wi-Fi-connected users simultaneously*
- Accesses and streams your music, videos, photos and data from an SD memory card or USB external storage using the free mobile app (available for iOS and Android operating systems)
- Built-in micro USB port for charging and transferring files
- Up to 9 Hours of continuous battery life**
- Charges your other portable electronic devices through the USB port (while in Off mode)
- Search function to locate and access your files
- Internet access capability via wireless, supporting 802.11 b/g/n speeds
- Supports multiple devices including iPad, iPhone, iPod Touch, Google Nexus, Samsung Galaxy and more

* Streaming performance limited by Wi-Fi bandwidth, encoded file data rate, and player buffering capability.
**Battery life subject to normal usage conditions and configurations.

Operating Modes

There are three main operating modes.

1. Direct USB Connection. Connect the MediaShare Wireless to your computer's USB port using the provided USB cable. The MediaShare Wireless will automatically mount, appearing on your desktop or in "My Computer". In this mode the battery of MediaShare will charge and you can transfer files between your computer and either an installed SD memory card or an installed USB drive/portable hard drive.

2. Wireless Connection. Use the MediaShare Wireless with your mobile device to stream music, pictures or videos from an SD card or USB device.

3. Wireless Internet Bridge mode. After enabling the Internet Bridge feature, wirelessly connect MediaShare to your existing wireless router to have internet access, while still being able to stream content on your device through the MediaShare Wireless.

Product Specifications

Product Dimensions: 112mm X 78mm X 14mm

Wi-Fi Radio:
Standard: 802.11 b/g/n
Frequency: 2.4 GHZ
Speed: 72Mbps at 20MHz / 150Mbps at 40MHz

Wi-Fi Security:
WPA-PSK
WPA4-PSK
Mixed WPA/WPA4-PSK (default)
Disabled

USB 2.0 Device Port: For data transfer and charging

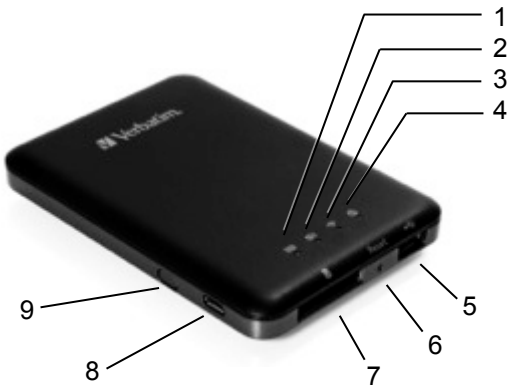
Battery:
3000 mAh capacity
Charges via USB micro-B port
Charging time: Up to 7 hours

Regulatory Certifications:
FCC (Class B), CE, IC RSS-210:2010 (Canada), CEC-2012-BCS (California, Battery Charger Efficiency Requirement)

System Requirements

- **Internet Connection** (for downloading app and user manual, and for use with optional Internet Bridge feature)
- **MediaShare Wireless Android app** (available for free download from the Google Play store)
- **Attached storage device** (1GB minimum): SD card (Class 4 or higher) or USB flash drive or USB hard drive
- **200MB available storage** on your installed SD card or USB storage device (This will be reserved for system functions and therefore not available for use.)
- **Android smartphone or tablet** running Android 2.3 version or higher.

Product View



COMPONENT	DESCRIPTION
1. Battery Level LED	● Green ON: The battery charge level is more than 30%. ● Red ON: The battery charge level is between 10% and 30%. ● Red Fast Flash: The battery charge is depleted and the unit will soon shut down. ● Green Slow Flash (every 2 seconds): The battery is charging. ● Green Slow Flash (every 1.5 seconds): The device is shutting down. ● LED off: The device is powered off.
2. Read / Write LED	During Wi-Fi disk mode: ● Blue ON: Memory connection is successful. ● Blue Flashing: Memory is reading or writing. During cabled connection mode: ● Blue ON: Connected to a USB host ● Blue Flashing: Connected to USB2.0 and is reading or writing.
3. Wi-Fi LED	● Blue Flashing: Connection has been initiated and is in process. ● Blue ON: Wi-Fi is connected ● LED OFF: ■ Device is ON, but the Wi-Fi signal is weak. ■ Device is OFF. ■ Device is in Mobile Mode but the Wi-Fi is off.
4. Internet LED	● Green ON: Connected to the Internet via the bridge. ● LED Off: Not connected to the Internet.
5. USB Host Port	● Insert a USB flash drive or USB portable hard drive for Wi-Fi access. ● In Power Off mode, USB port can be used to charge connected smartphone or tablet.
6. Reset Button	Insert a small tool (such as a paperclip) to press the button and reset the device to Factory Default configuration.
7. SD Card Slot	• Insert SD card for Wi-Fi access. • Insert microSD card using appropriate adapter.
8. USB Device Port	● Use the included USB cable to connect to a computer to enable data transfer. ● Use the included USB cable to connect to a USB port or USB charging adaptor to charge the device,
9. Power Button	Turns the device on/off.

Charging MediaShare

Using the provided cable, connect MediaShare Wireless to a powered USB port or USB charger to charge the built-in battery. It may take up to 7 hours to fully charge the battery.

Installing Storage Devices

MediaShare Wireless contains no internal storage. You must insert either an SD Card or a USB storage device before you are able to use with your smartphone or table.

Note: Once your SD Card or USB storage device is attached, MediaShare Wireless will reserve up to 200MB of the available capacity for temporary files and other system functions. Therefore, this space is not available for use.

MediaShare Wireless supports storage devices using FAT, FAT32, exFAT (for SDXC), or NTFS file systems.

Note: Prior to installing the SD Memory Card orUSB Device, make sure MediaShare WIreless is turned off.

Do not touch the exposed connectors on your SD Memory card.

SD Memory Card

Locate the SD memory card slot. Insert the memory card. Gently push the memory card all the way in until it locks into place.

USB Device

Locate the USB host port on the device. Insert a USB drive or portable hard drive cable into the USB port.

Using Mobile Devices

Installing the App

Power on your Android device (smartphone or tablet) and insure that it is connected to the Internet. Click on the “Play Store” icon on the desktop to access the Play Store.

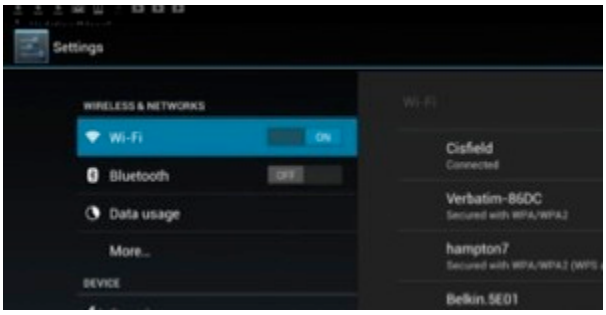
Search and locate the free “MediaShare Wireless” app, click on “Install” and follow the on-screen installation instructions. Once the installation process has been completed, the “MediaShare Wireless” app icon can be found on the desktop.

Wirelessly Connecting Your Android Mobile Device

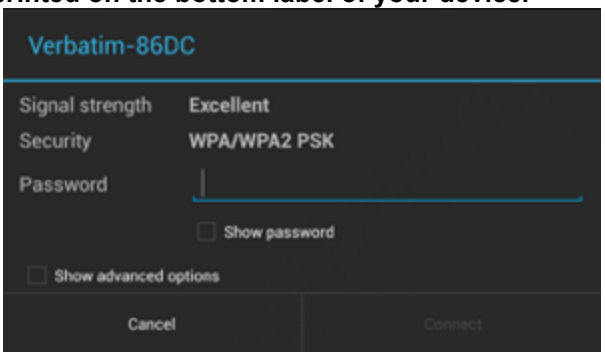
1. Turn-on MediaShare Wireless and wait for it to initialize. The blue Wi-Fi LED on the device should transition from blinking to fully ON to indicate that the initialization process has been completed.

2. Click on the “Settings” icon on your mobile device desktop.

3. Under “Wireless and Networks”, click on “Wi-Fi”. The SSID option for “Verbatim-XXXX” should appear in the list. (For example, click on “Verbatim-86DC”, as shown in the screen below. The “86DC” part of the SSID is the last 4 characters of the device MAC Address.)



When “Verbatim-XXXX” is selected for the first time you will be prompted for the Wi-Fi password. **The default password is printed on the bottom label of your device.**



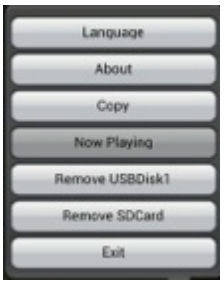
After the correct password is entered, the product will show as “Connected” in the list.

Launching the App

On your Android mobile device, click on the “MediaShare Wireless” icon to launch the app.

The home screen (image below) will show folders/files for the selected device (either MediaShare Wireless or smartphone/tablet). You can toggle between these two device views by clicking on “MyMediaShare” or “My Device”.

At the lower right you will find the 3-dot menu button.
When selected, this menu presents the following options:



Language
The language normally defaults to that of your Android smartphone/ tablet at the time of installation. If you later want to select a different language, you can make a selection from this menu. The following languages are supported.

- English
- Italian
- Spanish
- Croatian
- Hungarian
- Russian
- Traditional Chinese
- Korean
- French
- German
- Portuguese
- Czec
- Polish
- Serbian
- Simplified Chinese

About: The About button lists the firmware and app version numbers:

Copy: Click the Copy button to view the file transfer status.

Now Playing: When songs are playing in the background, you can select the Now Playing button to see information about the current song.

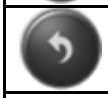
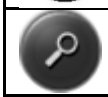
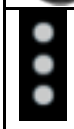
Remove USBDisk1: A currently mounted USBDisk volume can be safely unmounted using the Remove USBDisk1 button.

Remove SDCard: A currently mounted SDCard volume can be safely unmounted using the Remove SDCard button.

Exit: Pressing the Exit button is one way to close the app.

Basic Functionality

The action buttons for MyMediaShare can be found at the top of the screen and are listed below.

	Home Button – This will take you back to the main screen.
	View Button – Enables you to change to List or Thumbnail view.
	Settings Button – Allows you to change the MediaShare Wireless configuration.
	Back Button – This will take you back to previous screen.
	Manage Button – This is the file manager, allowing you to share, copy, delete and transfer files
	Search Box – Click this button to search for a specific file name and/or extension.
	3-dot Menu Button – Selecting this button will reveal the menu list for the following selections: About, Language, Copy, Now Playing, Remove USBDisk1, Remove SDCard and Exit.

Playing Music

Tip: We recommend that you create a folder or folders for saving all your music files for ease of use and file organization

Music or audio files can be played whether you are inside "MyMediaShare" or "My Device". Simply locate the music or audio file that you would like to play, click on the file and your music will automatically play.

Note: Please consult your Android mobile device manual to check whether it will support the music/audio files that you would like to play

Use the following icons to control music playback:

	Back – When clicked the current music that is playing will restart at 0.00. When double-clicked, it will play the previous music.
	Forward - When clicked, it will play the next music file.
	Play - When clicked, it will start playing the music or audio file.
	Pause - When clicked, the music or audio file will pause. Click again to resume the music or audio file.

There are five play modes:

1. Repeat All Songs – When clicked, the music or audio files will be played in sequence, only stopping when the pause button is clicked. (Default Mode)

2. Play Current Song – When clicked, the current music that is playing will be stopped, and playing progress will return back to 0.00.

3. Repeat Current Song – When clicked, the player will continue to repeat the current song, and it will only stop playing when the pause button is clicked.

4. Shuffle All Songs – When clicked, the music or audio files will be played randomly.

5. Play Current List – When clicked, the music or audio files will be played sequentially.

Tip: You can click and hold then slide music progress button to fast-forward or rewind the music

Tip: You can exit Music Player Interface at any time and the music will continue to play in the background

Playing Video

Tip: We recommend that you create a folder or folders for saving all your movie files for ease of use and file organization

Movie or video files can be played whether you are in "MyMediaShare" or "My Device". Simply locate the movie or video file that you would

like to play, click on the file and the list of installed movie players will appear.

Note: Please consult your Android mobile device manual and video player application manual for supported video encoding methods and file types, and for a description of the player control panel

The player control panel will vary depending on the installed movie player you have selected.

Playback performance depends on your Android device, your selected video player, your player's settings, the data rate of your encoded video file, the strength of your Wi-Fi connection and the number of simultaneous users. If the video plays but momentarily freezes on playback, then you can try these steps to improve video playback performance:

1)Copy the video file to your smartphone/tablet and initiate playback from the smartphone/tablet.
2)Reduce the number of simultaneous streaming users.
3)Re-encode the video file to a lower data rate and/or use a different encoder.
4)Select or install a different video player.
5)Check the settings of your video player.

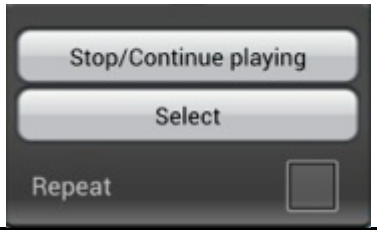
Viewing Photos

Tip: We recommend that you create a folder or folders for saving all your pictures for ease of use and file organization

Note: MediaShare Wireless currently supports .jpg, .tif, .gif and .bmp image files.

Supported images can be viewed as thumbnails or as a filename list. Any images that are not supported can be viewed as a generic thumbnail or icon.

Click on a picture thumbnail or picture filename to open and view it. Click on the displayed picture to access action buttons at the top of the screen as shown here:

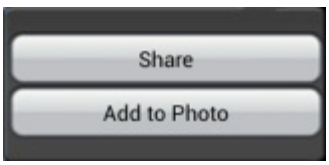
	Play – When clicked, a slideshow sill start, slowly cycling through every image in the current folder.
	Pause – When clicked, the slideshow will pause. Click again to resume the slide show.
	Repeat – When clicked, the slideshow will restart.
	Music – When clicked, you may stop or continue background music playing with your displayed picture or slideshow. You can also select new music to play in the background. Additionally there is a repeat check-box that may be selected to automatically repeat all songs or audio files in the selected folder. 
	Click the Back button to return to the previous screen.

Sharing Photos

Sharing photos using your Android device will vary depending on the apps installed on your device.

Note: Internet connection is required to share photos via email or accessing any social media network

Click on the Share button located at the top right of the screen to show the options available to



share your photos. Click the return button to return to the previous screen.

Viewing Documents

To open/view a document using your Android device, simply click on the file that you wish to open/view. This will automatically open the file using the default viewer or the installed app on your Android device.

Manage Mode

You may click on the Manage button at any time to enter the File Manage mode to share, copy, delete and transfer files. To exit the Manage mode click the Exit button.

To manage files on MediaShare, enter Manage mode from “MyMediaShare”.

To manage files on your smartphone/tablet, enter Manage mode from “My Device”.

Copy and Delete Functions

Once in Manage Mode you will see new icons at the bottom of the screen. See below for their functions.

	Select All – When clicked, all files are selected, placing a blue check mark will appear on every file. Click the Select All button again to deselect all files. **Tip:** you may select a single file or multiple files by clicking on the thumbnail. Also, you may click and hold the thumbnail and drag it to a lower icon to copy or delete a file or files
	Copy Files or Folders (from MyMediaShare)- When entering Manage Mode from MyMediaShare, you can copy a file **from** MediaShare **to** your smartphone/tablet. (The copy icon contains a downward arrow.)
	Copy Files or Folders (from My Device). When entering Manage Mode from My Device, you can copy a file **from** your smartphone/tablet **to** MediaShare. (The copy icon contains an upward arrow.) When copying files, you need to define the destination folder. A new folder may also be created by clicking on the “New Folder” button. Enter the new folder name and click the “Create” button. The folder name can be from 2 to 26 characters.
	Status – When clicked, you can view the list of files that are in queue for transfer, as well as the list of files that have already been copied successfully.
	Trash – When clicked, you can delete all files that have been selected. **Note:** Successfully copied/transferred files will be listed in the "recent" window. Click "Clear" to remove the history
	3-dot Menu Button. You may also click on the on the Copy button of the main screen 3-dot menu to check on the status.

Settings Menu

Settings – When clicked from within MyMediaShare, you may access various configuration operations.

MyMediaShare Settings

Host Name
<Reserved for future functionality.>

User
<Reserved for future functionality.>

Storage
You may attach an SD memory card or a USB storage device to MediaShare Wireless to serve as local storage. Click on “Storage” to view the type, size, and remaining available storage for each installed memory device.

Firmware Upgrade
Please visit verbatim.com/support periodically to see if a new firmware file is available for this product. If a new firmware version is available, you may download the file and install it as follows:

Note: Before attempting a Firmware Upgrade, ensure that the batteries of your MediaShare Wireless and smartphone/tablet are fully charged

1)Save the new file to the root directory of an SD memory card or USB storage device.
2)Attach the storage device containing the firmware upgrade file to your MediaShare Wireless and then power up

MediaShare Wireless.
3)Establish a wireless connection between your smartphone/tablet and MediaShare.
4)Open the MediaShare app and navigate to the Settings screen.
5)Click “Firmware Upgrade”. The new firmware file will be installed. As your MediaShare reboots you will temporarily lose Wi-Fi connection to your smartphone/tablet.

Wi-Fi and LAN Settings

MediaShare Wireless Device Name
To change the name of your MediaShare Wireless from the default name of “Verbatim-XXXX”, enter a new name in the dialogue box provided. Characters may be any combination of letters and numbers, and up to 32 characters long.

Security Options
The factory default setting for wireless security is Mixed WPA/WPA4-PSK. The unique default password is printed on the bottom label of the product. With this dialogue you may change the password, or alternatively set the wireless security to WPA-PSK, WPA4-PSK, or to Disabled (ie. no password required).

The password must be at least 8 characters, but no more than 63 characters.

If you change the password, and later forget your new password, you can return to the factory security setting by inserting a paperclip into the side panel reset button.

Mode
The factory default setting for wireless communication mode is 802.11b/g/n. With this dialogue you may alternative set the communication mode to 802.11b, 802.11g, or 802.11.n.

LAN
This dialogue will display the fixed MAC address of the product. Alternatively, you may view or change the current IP address and Subnet Mask.

Internet Settings

During normal operation, MediaShare Wireless requires only a single wireless connection with your Android smartphone/tablet. To make this connection, MediaShare Wireless defines the Wi-Fi channel to use (from 1-11). The factory default setting for channel selection is “auto”, which allows MediaShare Wireless to automatically choose the best channel based on current environment channel clarity. The connection is shown to the right as connection “A”.

However, in this mode, if you later want to browse the internet with your smartphone/tablet, you must break the “A” connection and instead connect your smartphone/tablet with an available router.

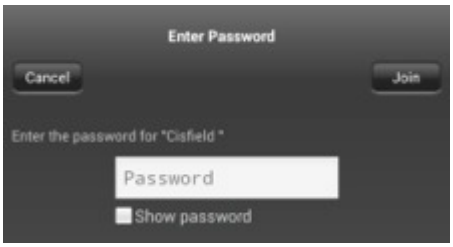
As a convenience, you can stay connected to both the MediaShare Wireless and the internet (at limited connection speeds) by enabling the Internet Bridge mode While in this mode (shown to the right) the Router defines the Wi-Fi channel, and two Wi-Fi connections are established (“A” and “B”) using this same channel number.

Because the Router is making the channel selection, and because different geographic regions use different channel ranges, MediaShare Wireless must know your Region whenever the Internet Bridge feature is enabled.

Internet Bridge
The Internet Bridge feature is disabled by default. To enable the bridge, click “On”, confirm the Region setting, and then select your available router.

A different range of Wi-Fi channels is supported by different geographical regions. If your region is not listed, choose a region with the same channel range as your own.

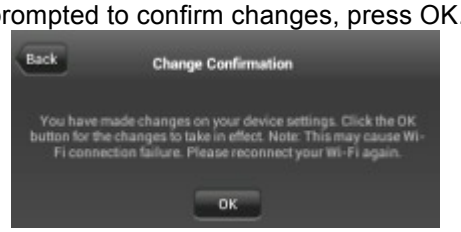
If your router requires a password, enter it to join the network.



Connecting to your router may also require setting DHCP versus Static IP. If Static IP, enter the IP Address, Subnet Mask, Gateway and DNS settings.

Once the Internet Bridge function is active you will see a check mark next to the router name in Settings and the green Internet LED on the MediaShare Wireless will be ON.

Press the Back button to exit the Settings menu. If you are prompted to confirm changes, press OK.


Back
Change Confirmation
You have made changes on your device settings. Click the OK button for the changes to take in effect. Note: This may cause Wi-Fi connection failure. Please reconnect your Wi-Fi again.
OK

Channel
If Internet Bridge is disabled, then you may optionally set the Wi-Fi channel number from 1-11. The default selection is “auto”, which allows MediaShare to choose a channel with the best signal quality.

If the Internet Bridge is enabled, then MediaShare will use the channel set by the router.

Clear Cache Button

Click the Clear Cache button to clear the SSID cache files that have been saved during prior sessions or from third party applications.

Exiting the MediaShare App

To exit the MediaShare app on Android devices, simply press the Home key on your mobile device.

Uninstalling the MediaShare App

If in the future you decided to uninstall the MediaShare app from your smartphone/tablet just follow these steps.

- From the Android desktop select Settings
- Select “Apps”
- Locate and click on the MediaShare Wireless app in the list of installed apps
- Click “Uninstall”.

Getting Help

If you are experiencing difficulty installing or using your Verbatim product, please visit the main Technical Support website at verbatim.com/support.

Limited Warranty Terms

Verbatim offers to the original owner a 2-year limited warranty. For warranty terms that apply in your region, visit verbatim.com/warranty.

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Caution!
The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

CE Compliance Declaration

This device complies with the essential protection requirements of the Radio and Telecommunications Terminal Equipment Directive 1999/5/EC and its amendments on the approximation of the laws of the Member States relating to wireless radio equipment and electrical safety.

EN 300 328 V1.7.1 : 2006
EN 301 489-1 V1.9.2 : 2011
EN 301 489-17 V2.2.1 : 2012
EN 55022 : 2010
EN 55024 : 2010
EN 62479 : 2010
EN 60950-1 : 2006+ A11 : 2009 + A1 : 2010 + A12 : 2011

Canada IC RSS-210:2010

This device complies with Industry Canada license-exempt RSS standards. Operation is subject to the following two conditions:
1) This device may not cause interference; and
2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
1) L'appareil ne doit pas produire de brouillage; et
2) L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi,même si le brouillage est susceptible d'en compromettre le fonctionnement.

WEEE Notice

The Directive on Waste Electrical and Electronic Equipment (WEEE), which entered into force as European law on 13th February 2003, resulted in a major change in the treatment of electrical equipment at end-of-life. The WEEE logo (shown at the left) on the product or on its box indicates that this product must not be disposed of or dumped with your other household waste. For more information about electronic and electrical waste equipment disposal, recovery, and collection points, please contact your local municipal household waste disposal service or shop from where you purchased the equipment.

Rights

Copyright ©2013 Verbatim Americas, LLC. No part of this document, with exception of the following Gnu license, may be reproduced in any form or by any means, for any purpose, without the express written permission of Verbatim Americas, LLC. All rights reserved. All other brands and product names referenced herein are property of their respective owners.

The embedded firmware for this product is provided under the terms of the Gnu General Public License.

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991
Copyright (C) 1989, 1991 Free Software Foundation, Inc.
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source

code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.